

WHAT IS CLAIMED IS:Sub a³

1. A set-top unit for connection to a cable television system comprising:
 - 5 a control channel tuner;
at least one programming tuner; and
a processor for controlling said tuners;
wherein said processor controls said at least one programming tuner to scan
a frequency band to locate a control channel.
 - 10 2. The set-top unit of claim 1, further comprising a memory unit,
wherein said processor, before controlling said at least one programming tuner to
scan a frequency band to locate a control channel, checks said memory unit for a
last known frequency at which said control channel was broadcast.
 - 15 3. The set-top unit of claim 1, wherein:
said processor controls said at least one programming tuner to tune
frequencies in said frequency band and identify frequencies carrying an active
signal; and
20 said processor controls said control channel tuner to tune said frequencies
carrying an active signal to locate said control channel.
 - 25 4. The set-top unit of claim 3, wherein, if said control channel is not
found at one of said frequencies carrying an active signal, said processor controls
said control channel tuner to tune frequencies in said frequency band until said
control channel is located.

5. The set-top unit of claim 3, wherein:

said at least one programming tuner comprises two programming tuners;

and

said processor divides said frequency band between said two programming
5 tuners and controls said two programming tuners to tune frequencies in different
portions of said frequency band to identify frequencies carrying an active signal.

6. The set-top unit of claim 1, wherein said processor divides said
frequency band among said control channel tuner and said at least one
10 programming tuner, and controls each said tuner to search a different portion of
said frequency band for said control channel.

7. The set-top unit of claim 6, wherein:

said at least one programming tuner comprises first and second
15 programming tuners; and

said processor divides said frequency band among said control channel
tuner and said first and second programming tuners, and control each said tuner to
search a different portion of said frequency band for said control channel

8. The set-top unit of claim 6, wherein each tuner provides a signal at
20 each tuned frequency to said processor for a determination as to whether said
signal is said control channel.

9. A method for acquiring a control channel of a cable television
25 system with a set-top unit connected to said cable television system, the method
comprising controlling at least one programming tuner of said set-top unit to scan
a frequency band to locate said control channel.

10. The method of claim 9, further comprising, before controlling said at least one programming tuner to scan a frequency band to locate a control channel, checking a memory unit of said set-top terminal for a last known frequency at which said control channel was broadcast.

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11. The method of claim 9, wherein said controlling at least one programming tuner to scan a frequency band to locate said control channel further comprises:

controlling said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal; and

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controlling a control channel tuner to tune said frequencies carrying an active signal to locate said control channel.

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12. The method of claim 11, wherein, if said control channel is not found at one of said frequencies carrying an active signal, said method further comprises controlling a control channel tuner to tune frequencies in said frequency band until said control channel is located.

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13. The method of claim 12, wherein said at least one programming tuner comprises two programming tuners; and said method further comprises dividing said frequency band between said two programming tuners and controlling said two programming tuners to tune frequencies in different portions of said frequency band to identify frequencies carrying an active signal.

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14. The method of claim 9, further comprising:
dividing said frequency band among a control channel tuner and said at least one programming tuner; and

controlling each said tuner to search a different portion of said frequency band for said control channel.

5 15. The method of claim 14, wherein said at least one programming tuner comprises first and second programming tuners; and said method further comprises:

dividing said frequency band among said control channel tuner and said first and second programming tuners; and

10 controlling each said tuner to search a different portion of said frequency band for said control channel

16. The method of claim 15, further comprising:

providing a signal from each tuner at each tuned frequency; and
determining whether said provided signal is said control channel.

15 17. A set-top unit for connection to a cable television system comprising:

first tuning means for tuning a control channel;

20 second tuning means for tuning a frequency in a composite signal from said cable television system independently of said first tuning means; and

processing means for controlling said tuning means;

wherein said processing means controls said second tuning means to scan a frequency band to locate said control channel.

25 18. The set-top unit of claim 17, wherein:

said processing means controls said second tuning means to tune frequencies in said frequency band and identify frequencies carrying an active signal; and

said processing means controls said first tuning means to tune said frequencies carrying an active signal to locate said control channel.

5 19. The set-top unit of claim 17, wherein said processing means divides said frequency band among said first and second tuning means, and controls each said tuning means to search a different portion of said frequency band for said control channel.

10 20. Computer-readable instructions stored in a medium for recording computer-readable instructions in a set-top unit for connection to a cable television system, the instructions causing a processor of said set-top unit to control at least one programming tuner of said set-top unit to scan a frequency band to locate said control channel.

15 21. The computer-readable instructions of claim 20, wherein said instructions further cause said processor to:
control said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal; and
control a control channel tuner to tune said frequencies carrying an active
20 signal to locate said control channel.

22. The computer-readable instructions of claim 20, wherein said instructions further cause said processor to:
divide said frequency band among a control channel tuner and said at least
25 one programming tuner; and
control each said tuner to search a different portion of said frequency band for said control channel.